ABSTRACT

A method of pacing opposing chambers of a heart with a pacing system is provided. The pacing system comprises a first unipolar medical electrical lead having at least one first electrode configured for positioning in a first opposing chamber of the heart, a second unipolar medical electrical lead having at least one second electrode configured for positioning in a second opposing chamber of the heart, an implantable pulse generator operably connected to the first and second unipolar medical electrical leads. The implantable pulse generator further comprises an hermetically sealed housing capable of serving as a can electrode, and means for switching electrode configurations between the first electrode and the can electrode, between the second electrode and the can electrode, between the first electrode and the second electrode and between the second electrode and the first electrode. A primary electrode configuration is determined. A cathode is selected from the first electrode, the second electrode and the can electrode based on the primary electrode configuration. An anode is selected from the first electrode, the second electrode and the can electrode based on the primary electrode configuration. A first pulse is delivered between the cathode and the anode. Systems, programs and devices using the method are also provided.